Appl. No. 09/527,634 Amdt. dated August 19, 2003 Response to Final Office Action of February 24, 2003

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently amended) A universal asynchronous receiver transmitter

(UART) comprising:

a first-in, first-out (FIFO) buffer;

a shift register coupled to said FIFO buffer;

a serial transmission line coupled to said shift register for connecting to a remote

processor;

a circuit for detecting a last word transmitted from said FIFO buffer over said serial transmission line;

a transmitter empty circuit for generating a transmitter empty signal a control signal relating to the availability of said serial transmission line on a transmitter empty control line when a last word transmitted from said FIFO buffer is detected;

a delay circuit for delaying generation of said transmitter empty control signal for a programmable delay time; and

a programmable register for setting said programmable delay time.

- 2. (Currently amended) The UART of claim 1 wherein said transmitter empty control signal is an internal signal triggered from a stop bit of said last word.
- 3. (Previously presented) The UART of claim 1 wherein said programmable register comprises a shadow register which is a write-only register with the same address as a read-only register only read by a user.
- 4. (Currently amended) The UART of claim 3 wherein said write-only register comprises the first [[4]] four bits of a modem status register.
- four bit register. (Original) The UART of claim 1 wherein said programmable register is a

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6. (Currently amended) The VART of claim 1 further comprising:
a plurality of channels, each channel having said FIFO buffer, said circuit for detecting a last word and said transmitter empty circuit; and

said delay circuit and said programmable register being a single circuit and register connected to control the delay of said transmitter empty control signal for each of said channels.

7. (Currently amended) A universal asynchronous receiver transmitter (UART) comprising:

a first-in, first-out (FIFO) buffer;

a shift register coupled to said FIFO buffer;

a serial transmission line, coupled to said shift register for connecting to a remote

processor;

a circuit for detecting a last word transmitted from said FIFO buffer shift register over said serial transmission line;

a transmitter empty circuit for generating a transmitter empty an RTS signal on a transmitter empty an RTS control line when a last word transmitted from said FIFO buffer shift register is detected, wherein said transmitter empty RTS signal is an internal signal triggered from a stop bit of said last word:

a delay circuit for delaying generation of said transmitter empty RTS signal for a programmable delay time;

a programmable register for setting said programmable delay time, wherein said programmable register comprises a shadow register which is a write-only register with the same address as a read-only register only read by a user;

a plurality of channels, each channel having said FIFO buffer, said circuit for detecting a last word and said transmitter empty circuit; and

said delay dircuit and said programmable register being a single circuit and register connected to control the delay of said transmitter empty RTS signal for each of said channels.

8. (Qurrently amended) The UART of claim 7 wherein said write-only register comprises the first [[4]] four bits of a modem status register.

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- 9. (Previously presented) The UART of claim 7 wherein said programmable register is a four bit register.
- 10. (Currently amended) The UART of claim 7 further comprising at least [[8]] eight of said channels.
- 11. (New) The UART of claim 2 wherein said stop bit is detected in said shift register.
 - 12. (New) The UART of claim 1 wherein said control signal is an RTS
- 13. (New) A universal asynchronous receiver transmitter (UART)

a first-in, first-out (FIFO) buffer;

a shift register coupled to said FIFO buffer;

a serial transmission line, coupled to said shift register for connecting to a remote

a circuit for detecting a last word transmitted from said shift register over said serial transmission line;

a transmitter empty circuit for generating a control signal relating to the availability of said serial transmission line on a control line when a last word transmitted from said shift register is detected;

a delay circuit for delaying generation of said control signal for a programmable delay time; and

a programmable register for setting said programmable delay time.

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processor;